



INTRODUCTION TO TRAUMA

Artwork from The Anna Institute

AGENDA

- Definition
- Prevalence
- Health and Social Outcomes
- Impact on Brain Development and Functioning
- Moving Towards Becoming Trauma Informed



Definition of Trauma

- Event
 - ▣ Actual or extreme threat of physical or psychological harm or the withholding of material or relational resources essential to healthy development. It can be a single event or repeated events
- Experience
 - ▣ How the person assigns labels or meaning to the event, depends on the perception of the individual
- Effects
 - ▣ Result of the person's experience of the event. This can include neurological, physical, emotional or cognitive effects

What We Know



- Trauma occurs when external events overwhelm a person's coping responses
- Severe and/or chronic trauma can have lasting adverse effects on physical, psychological, and social well-being
- Trauma is prevalent, at least 50% in general population have at least one traumatic event; more than 25% have two or more. In the human service field the majority of the population served have a trauma history

What We Know



- Trauma can result from adverse childhood experiences, natural disasters, accidents, interpersonal violence or war
- Early, severe and/or chronic trauma can affect the brain which can result in behaviors and emotions that appear maladaptive
- Trauma has an extremely high correlation with poor health and social outcomes

Chronic Trauma



- Chronic trauma refers to the experience of multiple traumatic events. These multiple events may be varied, such as a person who is exposed to domestic violence, involved in a serious car accident, and then becomes a victim of community violence.
- Chronic trauma may refer to longstanding physical abuse, neglect or war.
- Chronic trauma represents cumulative effects. Each new event reminds the individual of prior trauma and reinforces its total negative impact. To the person it feels relentless and uncontrollable

Why Do I Need to Understand Trauma

PREVALENCE

- Over half of the general adult population has experienced at least one trauma, 1 in 4 has experienced at least two events.
- It is estimated that 5 million children are exposed to traumatic events yearly in the US (Ruzek et al., 2007).
- By the age of 18, 43% of youth have experienced such an event



Incidence of Trauma for children with disabilities

Increased risk for abuse as compared to general population

	Incidents per 1,000	
	Children w/o disabilities	Children w/disabilities
Physical Abuse	4.5	9.4
Sexual Abuse	2.0	3.5
Emotional Abuse	2.9	3.5

Individuals with Disabilities

- Individuals with disabilities are 2 to 10 times more likely to be sexually abused than those without disabilities;
- Children with mental retardation were the most severely abused
- Risk of abuse increases by 78% due to exposure to the "disabilities service system" alone;



Developmental Disabilities

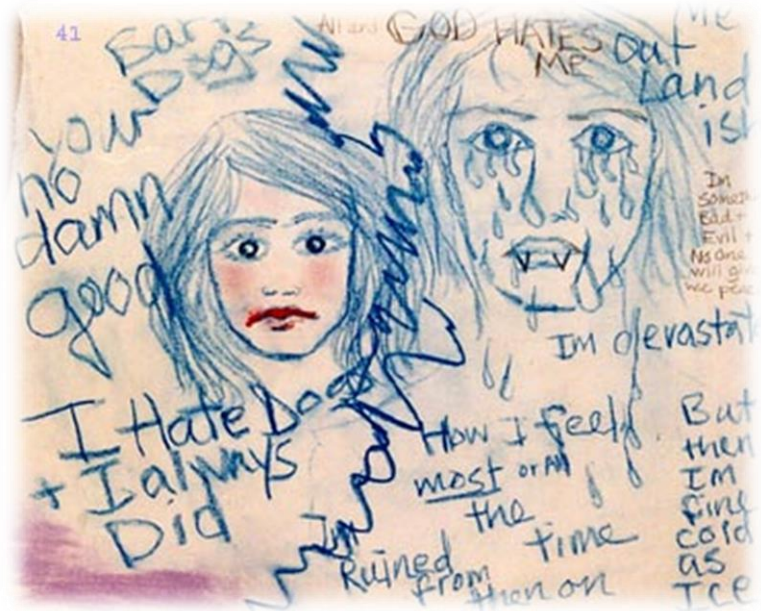
- Individuals with disabilities are over four times as likely to be victims of crime as the non disabled population.
- Five million crimes are committed against individuals with disabilities each year in US



Why Do I Need to Understand Trauma

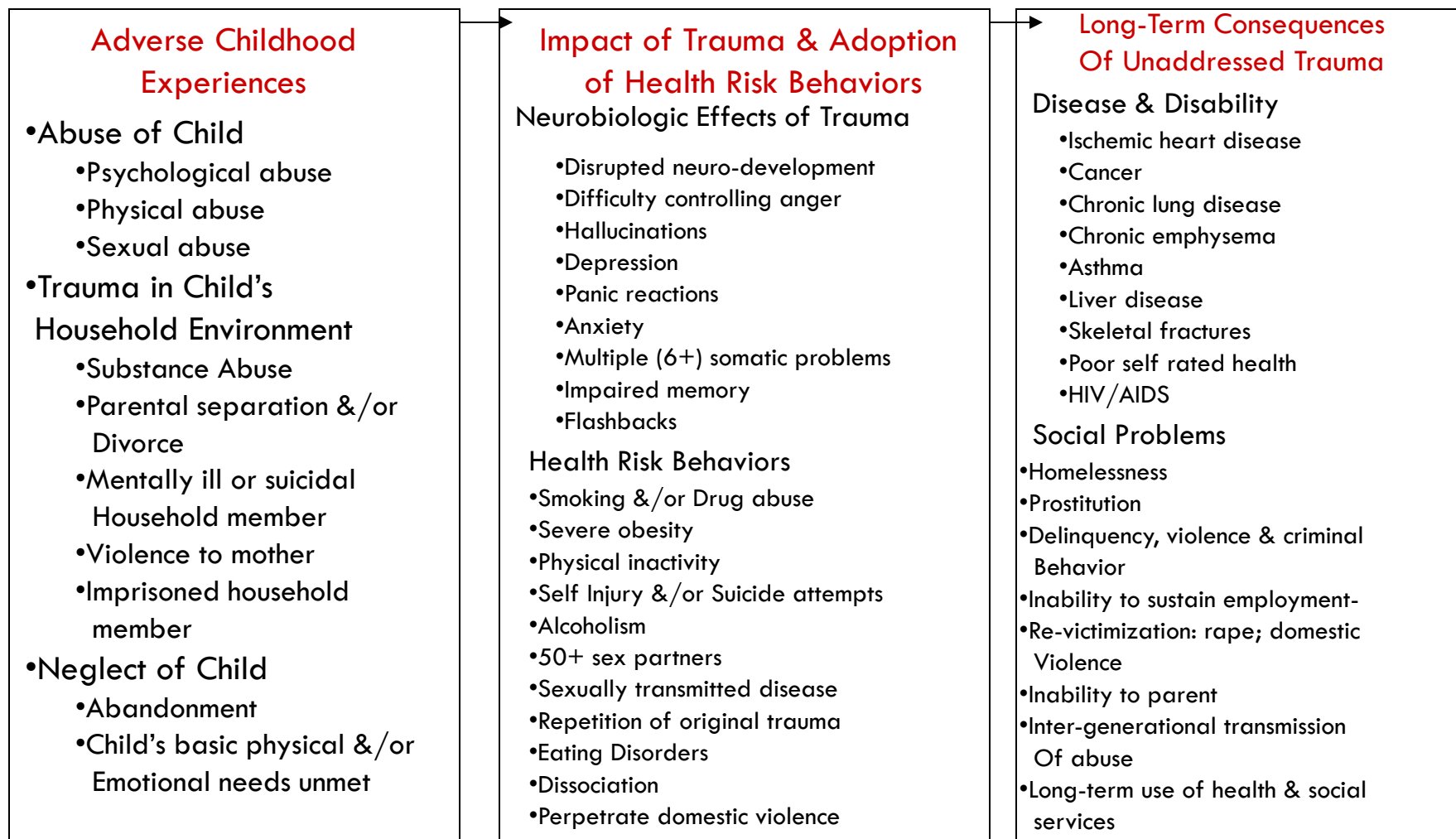
Trauma Effects All Aspects of Life

- Trauma can change the actual structure of the brain (especially in very young children). It also changes the way the brain works
- Trauma then impacts:
 - Relationships
 - Emotional Regulation
 - Behavioral Regulation
 - Attention/Concentration
 - Use of substances
 - Employment Capacities
 - Parenting Capacities

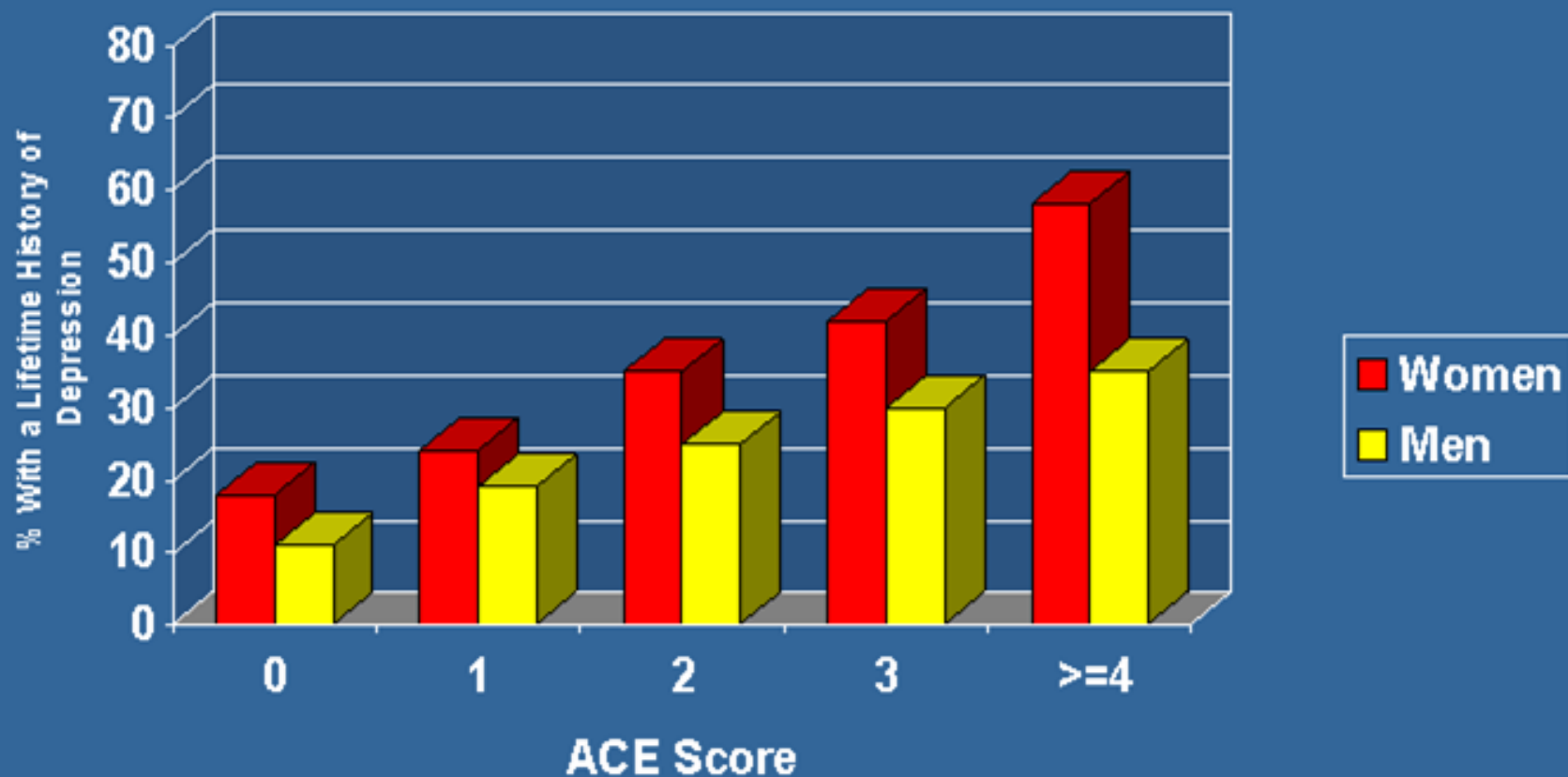


Adverse Childhood Experience (ACE) Study

Without intervention, adverse childhood events (ACEs) may result in long-term disease, disability, chronic social problems and early death. Importantly, intergenerational transmission that perpetuates ACEs will continue without implementation of interventions to interrupt the cycle.



Childhood Experiences Underlie Chronic Depression



Three Major Findings

1. Experiences are vastly more common than recognized or acknowledged,
2. The ACE Study reveals a powerful relationship between our emotional experiences as children and our physical and mental health as adults, as well as the major causes of adult mortality in the United States, and
3. Documents the conversion of traumatic emotional experiences in childhood into organic disease later in life.



Symptoms Associated with Trauma

Affect Dysregulation - 61.5%
Attention/Concentration - 59.2%
Negative Self-Image - 57.9%
Impulse Control - 53.1%
Aggression/Risk-taking - 45.8%
Somatization - 33.2%
Overdependence/Clinginess - 29.0%
ODD/Conduct Dx - 28.7%
Sexual Problems - 28.0%
Attachment Problems - 27.7%
Dissociation - 25.3%
Substance Abuse - 9.5%



Impact of Trauma



Strong and prolonged activation of the body's stress management systems in the absence of the buffering protection of adult support, disrupts brain architecture and leads to stress management systems that respond at relatively lower thresholds, thereby increasing the risk of stress-related physical and mental illness

Brain Development

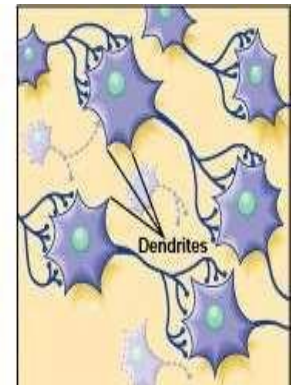
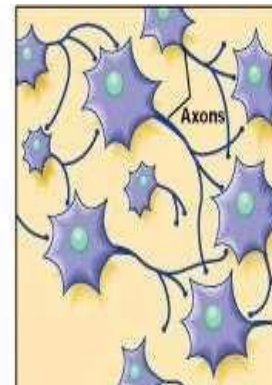
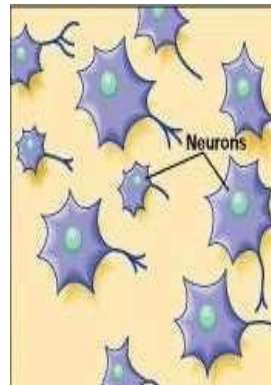
Brain at Birth

- 25% the size of the adult brain in weight and volume (less than 1lb)
- Nearly the same number of neurons as adult brain (100 billion)
- 50 trillion synapses (connections between neurons)
- Brain stem and lower brain well developed (reflexes), higher regions more primitive

Brain Development

Growing Older

- Number of neurons are in place
- Number of synaptic connections increases
Childhood to Adolescence
- Unused connections are pruned
- Used synapses are strengthened

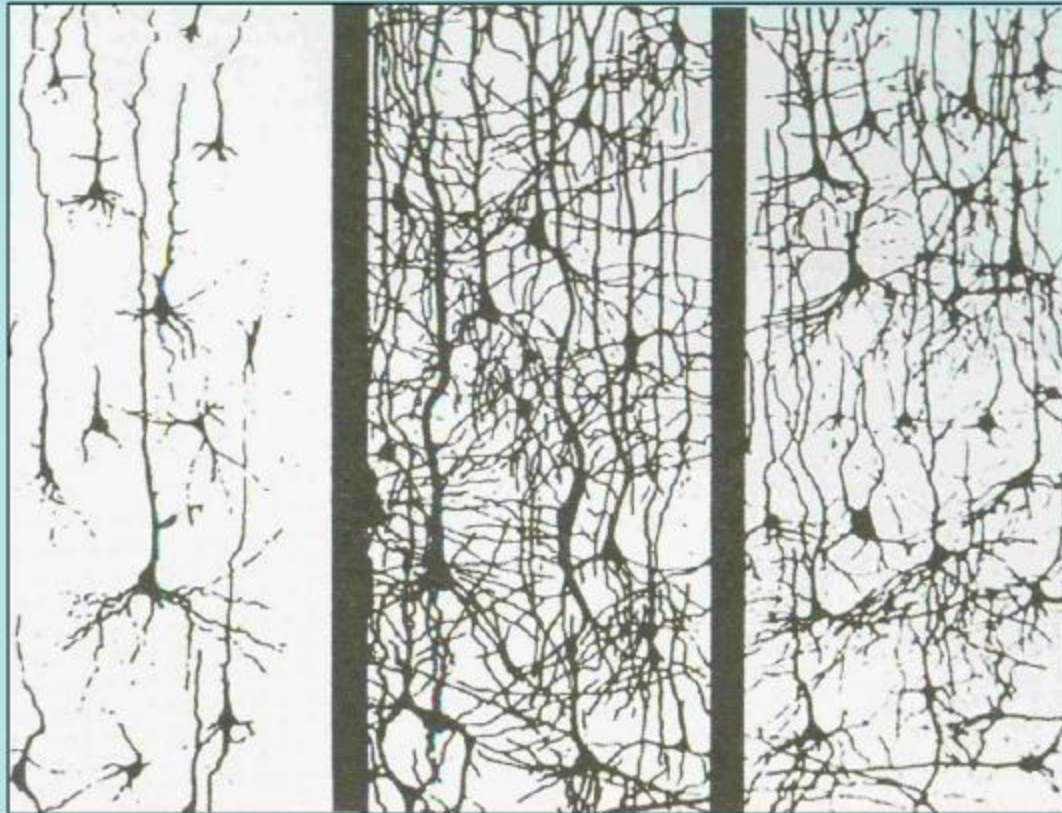


Synaptic Density

At Birth

6 Years Old

14 Years Old



Brain Development



- More stimulation, the better for neural development
- When the stimulation comes from chronic trauma, it strengthens the brain's connections to the trauma emotional response
- Early and repeated childhood trauma can be associated with reduced size of the brain cortex

Body Chemistry



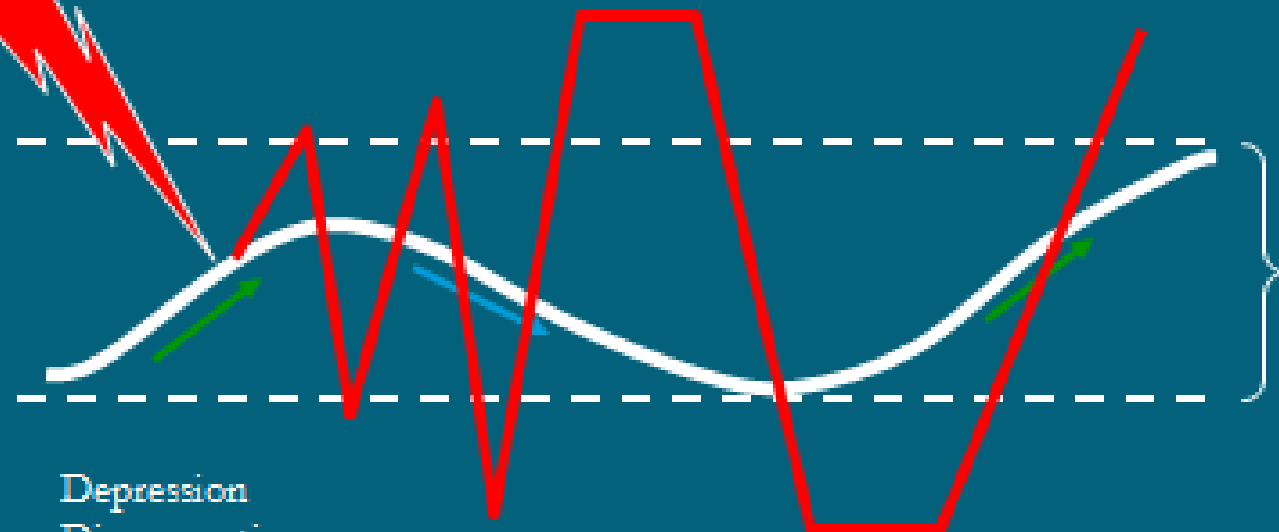
- Recognition of threat stimulates stress-response pathways. Adrenaline and several endocrine hormones are released into the bloodstream.
- Repeated acute stress response takes a toll on the body over time
- The individual may not fully return to baseline so may function at a hyper or hypo state of arousal

Trauma impacts on nervous system

**Traumatic
Event!**

Stuck on “High”
Hyper-arousal

Hyperactivity
Hypervigilance
Mania
Anxiety & Panic
Rage



Depression
Disconnection
Exhaustion/Fatigue
Numbness

Stuck on “Low”
Hypo-arousal

Developmental Response To Trauma

The meaning of a traumatic event is based on the individual's stage of neurological, cognitive and emotional development.



Impact on Relationships

- Relationships are developed through the emotional bond between the child & primary caregiver. It is through this relationship we learn to:
 - ▣ Regulate emotions/"self soothe"
 - ▣ Develop trust in others
 - ▣ Freely explore our environment
 - ▣ Understand ourselves & others
 - ▣ Understand that we can impact the world around us



Early Childhood Trauma



- ❑ Traumatic events have a profound sensory impact on young children
- ❑ Lack of understanding of cause and effect/interpretation of events
- ❑ May blame parents/caregivers for not preventing frightening events
- ❑ Parent/child shared trauma impacts ability to parent

Early Childhood Trauma

- Risk due to rapid development of brains making them more vulnerable
- Less able to anticipate danger or how to keep themselves safe
- Lack of control over events/environments
- Cannot always express their feelings in words



Adolescent Development

- Last period of major neural change and development
- Major synaptic pruning (elimination of nearly $\frac{1}{2}$ synaptic connections in brain)

Adolescents are more disrupted by stressors than adults

- Physiologically show an increased responsivity to stressors e.g. greater increases in blood pressure and blood flow in response to stress
- Respond with greater negative affect to stressful situations than children and adults
- Higher risk for drug abuse may be tied to elevated stress responsivity

Parent/Caregiver Trauma

- Caregivers reported being exposed to an average of 7 traumatic events
- Violent trauma is often self-perpetuating
- Trauma affects the way people approach potentially helpful relationships
- Research is starting to track "epigenetic" factors that are passed on through generations



Responding to People with Trauma

- We may unintentionally trigger someone's trauma response
- Need to reconceptualize individuals' responses from intentional to being a physiologically based response
- Organizations' policies and environments may also retrigger trauma

What is Needed to Address Trauma

- All Systems and even communities can become trauma informed to reduce the negative impact and support the healing process
- Trauma Aware
- Trauma Responsive
- Trauma Informed
- Trauma-specific interventions



The Core Principles



- Safety: Ensuring physical and emotional safety
- Trustworthiness: Maximizing trustworthiness, making tasks clear, and maintaining appropriate boundaries
- Choice: Prioritizing developmentally appropriate choice and control for children, youth, families and adults
- Collaboration: Maximizing collaboration and sharing of power with children, youth, families, and adults
- Empowerment: Prioritizing child, youth, family and adult empowerment and skill-building

Resources

- <http://www.nctsn.org>
 - ▣ http://www.nctsn.org/sites/default/files/assets/pdfs/traumatic_stress_developmental_disabilities_final.pdf
- <http://www.nimh.nih.gov/healthinformation/ptsdmenu.cfm>
(National Institute of Mental Health)
- <http://annainstitutue.org>
- http://traumaticstressinstitute.org/wp-content/uploads/2011/10/Trauma_and_Developmental_DisabilitiesF.pdf